DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
Office of Structural Materials
Quality Assurance and Source Inspection

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Contract #: 04-0120F4
Cty: SF/ALA Rte: 80 PM: 13.2/13.9
File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary
Address: 333 Burma Road
City: Oakland, CA 94607

Report No: WIR-011486
Date Inspected: 16-Jan-2010

Project Name: SAS Superstructure
Prime Contractor: American Bridge/Fluor Enterprises, a JV
Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island

OSM Arrival Time: 1900
OSM Departure Time: 700
Location: Shanghai, China

CWI Name:	See Below		**CWI Present:**	☑ Yes	☐ No
Inspected CWI report:	☐ Yes	☑ No ☐ N/A	**Rod Oven in Use:**	☐ Yes	☐ No ☑ N/A
Electrode to specification:	☑ Yes	☐ No ☐ N/A	**Weld Procedures Followed:**	☑ Yes	☐ No ☐ N/A
Qualified Welders:	☑ Yes	☐ No ☐ N/A	**Verified Joint Fit-up:**	☐ Yes	☑ No ☐ N/A
Approved Drawings:	☑ Yes	☐ No ☐ N/A	**Approved WPS:**	☑ Yes	☐ No ☐ N/A
			Delayed / Cancelled:	☐ Yes	☑ No ☐ N/A

Bridge No: 34-0006
Component: OBG

Summary of Items Observed:
CWI Inspectors: Mr. Zhu Tian Shu, Mr. Lv Li Qing

On this date CALTRANS OSM Quality Assurance (QA) Inspector, Mr. Paul Dawson, arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island, in Shanghai, China, for the purpose of monitoring welding and fabrication of the San Francisco / Oakland Bay Bridge (SFOBB) components. This QA Inspector observed the following:

OBG BAY 1

This QA Inspector observed ZPMC welder Mr. Cao Qi, stencil 216575, has recently used flux cored welding procedure WPS-B-T-2231-TC-U4b-F to make “T” bracket weld 13TB1-001-002. This QA Inspector observed ZPMC QC has recorded a welding current of 300 amps, 31.5 volts and Mr. Cao Qi, appears to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

OBG BAY 2

This QA Inspector observed ZPMC welder Mr. Yan Shitian, stencil 062708 is using flux cored welding procedure WPS-B-T-2232-TC-U5-F to make traveler rail weld 10TR2-003-014. This QA Inspector measured a welding current of approximately 320 amps and 32.0 volts. ZPMC QC Inspector Mr. Yang Qing Feng is monitoring this welding and Mr. Yan Shitian appears to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

OBG BAY 14

This QA Inspector observed ZPMC welder Mr. Wu Wanyong, stencil 050242 is using flux cored welding procedure WPS-345-FCAW-1G(1F)-Repair to make traveler rail repair weld 10TR3-020-014. This QA Inspector measured a welding current of approximately 280 amps and 31.0 volts. ZPMC QC Inspector Mr. Zhong Cao Hao is monitoring this welding and Mr. Wu Wanyong appears to be certified to make this weld. The weld repair document that lists this weld repair does not have any number assigned to allow tracking of this repair. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Zhang Quin Quan, stencil 044774 is using flux cored welding procedure WPS-345-FCAW-1G(1F)-Repair to make traveler rail repair weld 11TR1-007-014. This QA Inspector measured a welding current of approximately 310 amps and 32.0 volts. ZPMC QC Inspector Mr. QC Inspector Mr. Zhong Cao Hao is monitoring this welding and Mr. Zhang Quin Quan appears to be certified to make this weld. The weld repair document that lists this weld repair does not have any number assigned to allow tracking of this repair. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC has moved many of the OBG Traveler Rails that had previously been in OBG Bay 5 to the front of OBG Bay 14. Yesterday this QA Inspector observed Traveler rail 10TR3-038 has fifteen locations where ZPMC appears to have used the air carbon arc process to remove portions of the web plate lower weld (no number identified) and each of these locations appear to have been ground to a bright metal condition. This QA Inspector had measured the depth of two of these areas is approximately 11mm and since the nominal thickness of the web is 15mm these two locations will require a critical weld repair to be issued and approved prior to welding. Today this QA Inspector informed QC Inspector Mr. Zhong Cao Hao and ABF representative Mr. Bao Qian that Traveler rail 10TR3-038 will require a critical weld repair at the two locations where the depth of the gouges is 11 mm. Mr. Zhong Cao Hao and Mr. Bao Qian both said a CWR will be issued prior to repairs of these two areas. Mr. Zhong Cao Hao informed this QA Inspector that he did not know the weld number where these critical weld repairs need to be made. Items observed on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:

See Above.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang phone: 150-0042-2372 , who represents the Office of Structural Materials for your project.

Inspected By:	Dawson,Paul	Quality Assurance Inspector
Reviewed By:	Carreon,Albert	QA Reviewer